

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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C-O-N-F-I-D-E-N-T-I-A-L

50X1-HUM

COUNTRY China

REPORT

SUBJECT Electronic Tubes Manufactured in Communist China

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SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

A brochure issued by the China National Instruments Import Corporation under the title "Peking Electronic Tube" lists four types of miniature tubes (battery types) and nine types of miniature tubes (a. c. heater types). A series of diagrams illustrate the wiring of these tubes and related information. Twenty-three different specifications applicable to these tubes are set forth in tabular form.

50X1-HUM 4

A copy of this brochure, unclassified when detached from this report,

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Attachment: Folder in English entitled "Peking Electronic Tube"

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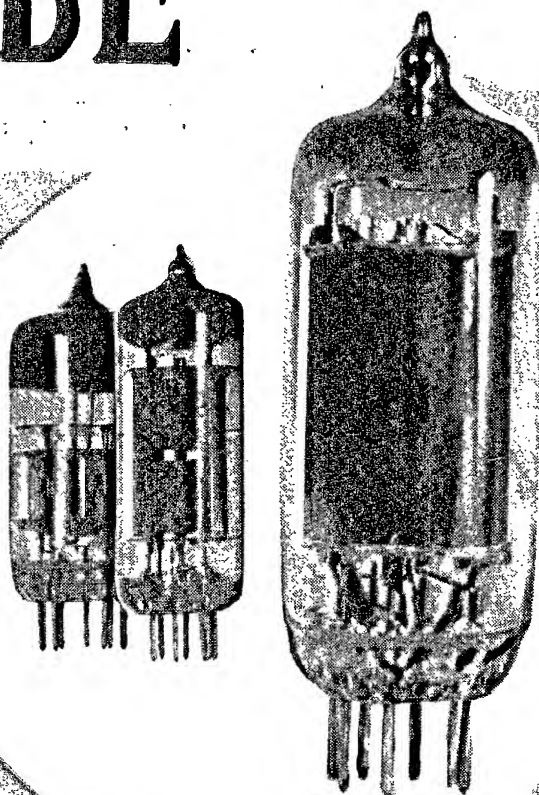
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(Note: Washington distribution indicated by "X"; Field distribution by "#".)

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INFORMATION REPORT INFORMATION REPORT

PEKING ELECTRONIC TUBE



中國儀器進口公司

CHINA NATIONAL INSTRUMENTS IMPORT CORPORATION

(IMPORTERS & EXPORTERS)

MINIATURE TUBES — BATTERY TYPES

Type	Name	Filament		Plate voltage	Screen voltage	Grid No. 1 D.C. voltage	Plate current	Screen current	Transconductance	Amplification factor	Plate resistance	Load resistance	Power output	Max. plate dissipation	Max. screen dissipation	Max. cathode current	Inter-electrode capacitance			Life	Max. external diameter	Max. height
		Type	Current														Input	Output	Grid-Plate			
			V. A.	V.	V.	V.	mA.	mA.	mA/V.		K Ω	K Ω	mW.	W.		mA.	pF.	pF.	pF.	hr.	mm.	mm.
1A2II	Heptode-Converter	direct heat	1.2	0.03	60	45	R _{g1} = 51K Ω	0.7	1.1	$S_o = 0.24$ $S_o = 0.22$	R _{g1} = 0			0.3		3	5.1	6.3	≤ 0.6	1000	19	57
152II	Diode-Pentode	direct heat	1.2	0.03	60	45	0	0.9	0.13	0.55			0.15			2	1.85	2.1	0.27	1000	19	57
1K2II	Pentode, R. F., remote cut-off	direct heat	1.2	0.03	60	45	0	1.35	0.35	0.7			1500			3.5	3	4.9	0.01	1000	19	57
212II	Power Triode	direct heat	1.2/2.4	0.08/0.05	60	45	-0.5	3.5	0.8	1.1		120	20	75	0.4	average value 7 peak value 10	3.7	3.8	0.4	1000	19	57

MINIATURE TUBES — A. C. HEATER TYPES

Type	Name	Type	Heater		Plate voltage V.	Screen voltage V.	Grid No. 1 D.C. voltage V.	Plate current mA.	Screen current mA.	Transcon- ductance mA/V.	Amplifi- cation factor	Plate resistance K Ω	Load resistance K Ω	Power output W.	Max. plate dissipation W.	Max. screen dissipation W.	Max. plate current mA.	Inter-electrode capacitance			Inter- electrode tube types	Max. external diameter mm.	Max. height mm.	Life hr.
			Voltage V.	Current A.														Input pF.	Output pF.	Grid-Plate pF.				
6A2II	Heptode-Converter	indirect heat	8.3	0.3	250	100	R _{g1} = 20K Ω	3	1/2 1/4-7	S _o \geq 0.3 S _o \geq 4.5	R _{g1} = -1.5 V.	I _{g1} = 0.5 mA		1.1	1.1	14	7	8.5	0.3	6BE3	19	57	500	
6W1II	Pentode, R. F., sharp cut-off	indirect heat	8.3	0.17	120	120	R _k = 200 Ω	7.35	\leq 3.2	5.2		300		1.8	0.55	\leq 20	4.3	2.35	\leq 0.02	6AK5	19	48	500	
6K4II	Pentode, R. F., remote cut-off	indirect heat	6.3	0.3	250	100	R _k = 60 Ω	10	\leq 5.5	4.4		850		3	0.8	20	6	6.3	\leq 0.0045	6DA6*	19	63	500	
6H1II	Medium- μ Twin Triode	indirect heat	6.3	0.6	250		R _k = 800 Ω	7.5		4.53	39		2.2*	25	3.1	1.85	\leq 2.7				22.5	56	500	
6H2II	High- μ Twin Triode	indirect heat	6.3	0.34	250		-1.5	2.3*		2.1	97.5		19*	1	10	2.35	2.35**	3.13***	0.7		22.5	56	500	
6H11II	Born Power Triode	indirect heat	6.3	0.5	250		-12.5	44	\leq 7	4.9		42.5		5	4.8	12	2.5	70	8	5	0.9	22.5	73	500
6X2II	Twin Diode Detector	indirect heat	6.3	0.3	R _{pp} = 2 x 150 V.			R _{pp} = 450 V.			I _{max} \leq 60 mA I _o \geq 17 mA		C _y = 8 pF								6AL5	19	48	500
611II	Twin Diode Full-wave Rectifier	indirect heat	6.3	0.6	R _{pp} = 2 x 350 V.			R _{pp} = 1000 V.			I _{max} \leq 300 mA I _o \geq 72 mA		C _y = 8 pF								6X4 Δ	19	62	500
EM-40	Electron-ray Indicator	indirect heat	6.3	0.3	250		-1/-14	0.37/0.01			Cathode voltage = 250 V. Cathode current = 2-3 mA.										22.5	72		

NOTE: R_{pp}: Effective a.c. plate supply voltage
R_{pk}: Plate peak inverse voltage
I_{pk}: Plate peak current
I_{or}: D. C. output current
R_g: Grid No. 1 circuit resistance

R_k: Self-bias voltage
I_{g1}: Grid No. 1 current
S_o: Conversion transconductance
S_{oc}: Oscillation transconductance
E_{g1}: Grid No. 3 bias voltage

I_{g1}: Grid No. 1 current
C_g: Filter capacitance
Δ: Different connection of tube electrodes
★: In 6K4II, grid No. 3, cathode and shield are connected together.

*: Each triode
First triode
**:
***: Second triode
Para: Parallel
Ser: Series

